WHAT IS CLAIMED IS:

1. A mobile host for determining a route in a mobile ad-hoc network, comprising:

a power information calculator for calculating power information using link transmission power, which will enable the mobile host to transmit data, and remaining battery power;

a message generator for generating a message for determining a host for a requested service and generating an SQPE (Service Query Power Extension) message including the power information calculated by the power information calculator; and

a radio module for converting the generated SQPE message into a radio signal and broadcasting the radio signal to the mobile ad-hoc network.

2. The mobile host according to claim 1, further comprising:

a controller for controlling the power information calculator, the message generator, and the radio module.

3. The mobile host according to claim 1, further comprising:

a route cache for caching SQPE messages received from other mobile hosts; and

a message selector for selecting an SQPE message having a largest power information from among the SQPE messages received from the other mobile hosts,

wherein the power information calculator generates new power information in the SQPE message using power information of its mobile host and power information included in the SQPE message having the largest power information; and

wherein the message generator and the radio module re-broadcast the SQPE message based on the information calculated by the power information calculator.

4. The mobile host according to claim 3, further comprising:

a service route table for storing information of a service route,

wherein the service route table is checked when the SQPE message is received, and the message generator generates an SRPE (Service Reply Power Extension) message when requested route information is present and the service route is valid.

5. The mobile host according to claim 4, wherein the SRPE message comprises:

an address of a host generating the SRPE message;

an address of a host capable of providing service;

a service name;

an address of a service request host;

an address of a service destination host;

a distance between the service request host and the service destination host; and

power information.

6. The mobile host according to claim 1, wherein the SQPE message comprises:

an address of a host generating the SQPE message;

an address of a service request host;

a service name;

an address of a service destination host; and

power information.

7. A method for determining a route for enabling a mobile host to receive a requested service in a mobile ad-hoc network, comprising:

collecting information of the requested service and determining whether route information of the requested service is present in a previously provided service route table, when the service is requested;

calculating power information of the mobile host, generating an SQPE (Service Query Power Extension) message including the calculated power information, and broadcasting the generated SQPE message, when the route information of the requested service is not present in the service route table; and

establishing a service route based on the route information included in an SRPE (Service Reply Power Extension) message, when the SRPE message is received as a response message to the SQPE message.

8. The method according to claim 7, further comprising:

storing the route information included in the SRPE message in the service route table.

9. The method according to claim 7, further comprising:

receiving another SQPE message from another mobile host, after the SQPE message is transmitted from the mobile host;

including the calculated power information in the received SQPE message; and

re-broadcasting the SQPE message including the calculated power information.

10. The method according to claim 7, wherein the SQPE message comprises:

an address of a host generating the SQPE message;

an address of a service request host;

a service name;

an address of a service destination host; and

power information.

11. The method according to claim 7, further comprising:

receiving another SQPE message from another mobile host, after the SQPE message is transmitted from the mobile host;

determining whether requested destination route information based on the SQPE message from the another mobile host is present in the service route table;

generating an SRPE message based on the requested destination route information, when the requested destination route information is present;

including the power information of the mobile host and power information of the service route in the SRPE message; and

transmitting the SRPE message to the another mobile host having generated the SQPE message.

12. The method according to claim 11, wherein the SRPE message is generated only if the service route is valid when the service route information is present in the service route table.

13. The method according to claim 11, wherein the SRPE message comprises:

an address of a host generating the SRPE message;

an address of a host capable of providing service;

a service name;

an address of a service request host;

an address of a service destination host;

a distance between the service request host and the service destination host; and

power information.

14. A method for enabling a mobile host to receive and relay a service request message for route discovery in a mobile ad-hoc network, comprising:

receiving the service request message;

determining whether requested destination route information based on the service request message is present in a service route table;

generating a service response message using the requested destination route information, when the requested destination route information is present;

including power information of the mobile host and power information of a service route in the service response message; and

transmitting the service response message to a mobile host sending the service request message.

15. The method according to claim 14, further comprising:

when the service request message is firstly received, waiting for receiving messages indicating information associated with another mobile host and a destination host for a preset time, the received messages being associated with the service request as in the service request message;

selecting a message having a largest power information from among the received messages associated with the service request; and

generating the service response message according to a result of the selection.

16. The method according to claim 14, further comprising:

including the power information of the mobile host in the service request message and re-broadcasting the service request message, when the requested destination information based on the service request message is not present in the service route table.

17. A method for determining a route in a mobile ad-hoc network including a plurality of mobile hosts, comprising:

broadcasting, from a requesting mobile host of the plurality of mobile hosts, a service request message including service information, an address of the requesting mobile host, a service destination address, and power information;

selecting, by at least one relay mobile host of the plurality of mobile hosts, a service request message having a largest power information from among service request messages received for a first time when the service request message is received, calculating power information of the at least one relay mobile host, including the calculated power information of the at least one relay mobile host in the power information included in the selected service request message, and re-broadcasting the service request message; and

selecting, by a destination mobile host of the plurality of mobile hosts, a service request message having a largest power information from among service request messages received for a second time when the service request message is received, generating a service response message, and transmitting the service response message along a route of the selected message.

18. The method according to claim 17, wherein the power information calculated in each of the mobile hosts is produced using link power information at a time of providing service and remaining battery power information.

19. The method according to claim 17, wherein power information of the service request message updated by the at least one relay mobile host is an update value considering power information of a previous relay host, and mobility and power information of the at least one relay mobile relay host.

20. The method according to claim 17, further comprising:

checking, by each of the at least one relay hosts, a service route table, when the service request message is received;

generating the service response message when requested route information based on the service request message is present in the service route table; and

transmitting the service response message to the requesting mobile host.

21. The method according to claim 20, wherein each of the at least one relay hosts generates the service response message only if the route is valid when the route information based on the service request message is present in the service route table.